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GREY HONEYEATER BREEDING RECORDS AND HABITAT IN THE PILBARA, WESTERN AUSTRALIA.

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INTRODUCTION

The Atlas of Australian Birds (Blakers *et al.* 1984) mapped Grey Honeyeaters, *Conopophila whitei*, in eighteen 1° blocks. It shows that the species has an extensive range from north eastern South Australia through central Australia and across the centre of Western Australia to the Pilbara and suggests that there are no major gaps in this range. However distribution within the range seems to be patchy.

Paton (1981) reviewed the 16 pre-Atlas published records of Grey Honeyeaters. They include eight breeding records. We have examined copies of the original Atlas reports which show that the two breeding reports mapped in the Atlas were those published by Curry (1979) and Menkhorst (1979) which Paton had included in her review.

Although Storr (1984) states that

the Grey Honeyeater is "locally moderately common, e.g. around Tom Price, but generally scarce" in the Pilbara and Wells and Wells (1977) found five pairs within a radius of about 1 km near Yalgoo, the species is generally considered rare. This is reflected by its inclusion on the list of species gazetted under the Western Australian Wildlife Conservation Act 1950 on Schedule 1; "fauna that is likely to become extinct, or is rare" (Anon. 1990). Garnett (1992) did not define its status in Western Australia because he considered the species to be "insufficiently known" in this State.

OBSERVATIONS

As part of a study of fire effects in mulga in the Pilbara we have established 24 sites where we regularly count birds. Sixteen sites are in the vicinity of The Governor and eight are close to Mt. Bruce in

Karijini National Park. In each case half of the plots are in mature mulga woodland and half are in other habitats usually dominated by hummock grass (*Plectrachne* and *Triodia* spp) but most of the latter have either regenerating mulga or localised patches of mulga.

We have observed Grey Honey-eaters seven times, always in mature mulga woodland. Two were near The Governor. The remainder, including three breeding records, were at two of the eight sites near Mt. Bruce. Breeding records are:

- 22 September 1991. A pair feeding a free-flying youngster in the canopy of a mulga tree.
- 19 May 1992. At the same site, a nest contained one egg. (A fortnight later there was one young bird; Keith Cunningham pers. comm.).
- 18 August 1992. A nearly completed nest at the other site where we had (twice) previously seen Grey Honey-eaters.

Both nests were fragile-looking cups made of plant fibres bound into a net by spider web. They were about 2m from the ground in horizontal forks at the extremities of mulga branches. The egg was visible through the bottom of the nest. Both nests were adorned outside with many small, white, woolly lerps made by hemipterans (we have also observed the birds feeding on the insects which they expose by removing their woolly shelters). The one relatively large egg was white with a corona of irregular, angular, brick-red markings at the girdle. They

became progressively less numerous towards the ends, which were unmarked.

The building birds reacted to human presence by excitedly flying and calling within a metre or two of the observer. The pair with an egg remained in the nest tree, unobtrusively moving about the canopy while we examined the nest. One bird returned to sit within a minute or two of our departure and while we were still within ten metres of the nest.

DISCUSSION

Our observations of the behaviour, nest, egg colour and habitat conform with previous reports. Other observers have also noted a clutch of one although two eggs are sometimes laid. We record breeding twice in spring (August and September) and once in autumn (May). All seven of the previous spring records are from Western Australia. The only other autumn record is from far north-eastern South Australia (Glover 1968). (For a summary of previous reports and their references see Paton 1981.)

In autumn (May) 1992 many passerines at our study sites were beginning to breed. There had been two good rainfall events in the previous month. Likewise both our spring records were made at times when many passerines were breeding after good rains. We suggest that this species, like many other passerines of the arid zone, commonly breeds after good rain. However Wells and Wells (1981) found a nest near Yalgoo in November after nearly three years

of drought. The predominance of spring records might reflect the predominance of winter rainfall over much of the mulga belt but it might also be influenced by the preference of observers to visit those areas in spring.

Our methods ensure that we put equal effort into counts at each of our 24 sites. Our data set now contains over 2000 bird records. Only six are of Grey Honeyeaters; all of them from three of twelve study sites supporting mature mulga woodland. This suggests that, in the Pilbara, the species inhabits some but not all mature mulga woodland communities. We do not yet know what attributes make some mulga woodlands attractive to this elusive bird. However we caution that many mulga woodlands in the Pilbara are fire-vulnerable.

Fire is probably the most serious threat to the species there. However other causes of mulga degradation, including water shadows down-slope of structures such as roads and railway lines and grazing by domestic or feral stock, could be locally significant threats. We acknowledge that Grey Honeyeaters are easily overlooked and that they might be more common than records suggest. Nevertheless, in the Pilbara, this species would seem to be genuinely rare with a patchy distribution.

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REFERENCES

- Anon., 1990. *Government Gazette*, W.A. 16 November 1990: 5696-97.
- Blakers, M., Davies, S.J.F. and Reilly, P.N. 1984. *The Atlas of Australian Birds*. Melbourne University Press.
- Curry, P.J. 1979. Breeding Records of the Grey Honeyeater in the Upper Lyons River District. *West. Aust. Nat.* 14: 162-163.
- Garnett, S. 1992. *The Action Plan for Australian Birds*. Australian National Parks and Wildlife Service. Canberra.
- Glover, B. 1968. Bird Report. 1966-67. *S. Aust. Ornith.* 25: 27-45.
- Menkhorst, P. 1979. Breeding Records of the Grey Honeyeater in the Upper Lyons River District. *West. Aust. Nat.* 14: 162-163.
- Paton, J.B. 1981. The Grey Honeyeater: A Review of Distribution and variation. *S. Aust. Ornith.* 28: 185-190.
- Storr, G.M. 1984. Birds of the Pilbara Region, Western Australia. *Rec. West. Aust. Mus. Suppl.* No. 16: 1-63.
- Wells, A.G. and Wells, B.A. 1977. Breeding Records of the Grey Honeyeater. *West. Aust. Nat.* 13: 209-210.